

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 2. This sheet, which includes Fig. 2, replaces the original sheet including Fig. 2. In Figure 2, previously omitted element 200 has been added.

Attachment: Replacement Sheet(s)
Annotated Sheet Showing Changes

REMARKS/ARGUMENTS

Reconsideration of this application is requested. Claims 1-20 remain in the application of which claims 12-15 have been withdrawn from consideration. The examiner's statement in item 2 of the Official Action that the election of claims 1-11 and 16 was made without traverse is incorrect – the response of October 14, 2004 specifically stated that the requirement for restriction was traversed to the extent that non-elected process claims be rejoined once the elected product claims are in condition for allowance. Accordingly, claims 12-15 have not been canceled but remain part of the claim set present in this application.

New claims 17-20 have been added, dependent from claim 16. The new claims correspond to claims 3-5 and 8 but dependent from claim 16.

In item 4 of the Official Action the drawings were objected to as lacking a description of elements 104a and 104c. The specification is amended on page 27 to include a discussion of both sections 104a and 104c.

In item 5 of the Official Action the drawings were objected to as failing to show a "slit" as specified in claim 10. Figure 2 of the drawings has been amended to include slit 200 and appropriate changes made to page 26 in the specification.

In item 9 of the Official Action claim 3 is objected to as being indefinite and this has been resolved by appropriate amendment of claim 3.

In item 18 of the Official Action the examiner indicates claim 4 to be objected to as being dependent on a rejected base claim but otherwise allowable if rewritten in independent format. Claim 4 has been amended in independent format thus claim 4 should be allowed.

The balance of the Official Action relates to a series of prior art-based rejections directed to claims 1-3, 5-11 and 16. Before addressing these rejections it is helpful to review the advantages offered by the present invention over prior arrangements and constructions

According to the present invention, the holding member is formed by dewatering. During its formation, since the density of the slurry is sufficiently low, the fibers are disposed in parallel with the surface of the dewatering mold. This is similar to a paper mill process. As a result, the fibers are disposed in a direction parallel with the outer surface of the carrier. The fibers are at right angles with the thickness direction of the holding member.

In general, when the carrier with the holding member is inserted into the casing, a force in the thickness direction of the holding member is loaded. If the fibers are disposed in the thickness direction, the fibers will be fractured by this force.

However, according to the present invention, since the fibers are disposed at right angles to the thickness direction, the fibers are prevented from fracturing when the carrier is inserted. Further, even after the carrier insertion, the holding member is flexible, and its high cushion ability can be retained.

In contrast to the present invention, in the Merry reference, since material in a paste form is cast into the mold, it is impossible to control or orient the direction of the fibers. As a result, the fibers would be fractured, and a foam directing in a non-thickness direction would be generated from Vermiculite. The resulting product has insufficient performance characteristics.

In use, the catalyst converter is heated and cooled. Since the carrier is made of cordierite ceramics, there is no thermal expansion-shrinkage generated to the carrier, the metallic casing is greatly expanded-shrunk by the heating-cooling. The holding member is originally installed to absorb the difference of the thermal expansion-shrinkage between the carrier and the casing, however, stress (a repeated compressive-restorative stress) is loaded onto the holding member. Since the stress is loaded in the thickness direction as well, endurance to the repeated stress is increased and useful service life improved when the fiber is disposed directed in parallel with the outer surface of the carrier. With these points clearly in mind the rejections based upon prior art are now addressed.

In item 10 of the Official Action claims 1-3, 9 and 16 are rejected as allegedly being anticipated. The rejection is both legally and factually deficient in that the applied reference does not describe each and every characteristic of the subject matter defined by applicants' claims. To anticipate a claim, a single reference must disclose the claimed invention with sufficient clarity to prove its existence in the prior art. *Motorola Inc. v. Interdigital Technology Corp.*, 43 USPQ2d 1481, 1490 (Fed. Cir. 1997). Anticipation rejections are only proper when the "claimed subject matter is identically disclosed or described in 'the prior art,' without *any* need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference." *In re Arkley*, 172 USPQ 524, 526 (CCPA 1972). Every

element of the challenged claim must be disclosed within this single reference. *PPG Industries Inc. v. Guardian Industries Corp.*, 37 USPQ2d 1618, 1624 (Fed. Cir. 1996).

The anticipation rejection is flawed for this reason alone as applicants will now demonstrate. Merry (U.S. 5,686,039) only discloses a carrier holding member and a catalyst carrier. Since Merry is silent about a casing, Merry does not disclose "a surface in contact with the casing and substantially in conformity to an inner shape of the casing" nor does it describe "a thickness (of the catalyst holding member) equal to or larger than the gap".

Further, Merry does not disclose "flexible inorganic fiber bound by a binder in a compression-deflected state".

Therefore, claims 1 and 16 (and the other pending claims) are novel and allowable.

In item 15 of the Official Action claims 5-7 are rejected as being "obvious" over the Merry reference. In making the rejection, it is stated that the specific percentage of binder is not considered to confer patentability to the claim and that the claim percentage cannot be considered "critical". This statement is based upon a misunderstanding of applicants' description of their invention.

The specific percentage of binder of claims 5 and 19 is indeed "critical". As described in lines 4-6, page 10 (line 24, page 10 to line 2, page 11) of the specification, "An amount less than 1 part result in insufficient binding of the fibers. An amount more than 10 parts will furnish a source of a contaminant to exhaust gases". Further, if the binder is more than 10 parts, there are other disadvantages: a) abnormal odor is generated by the heating of the binder when the exhaust gases are exhausted at the first time, b) the emission becomes polluted, and c) a holding ability of the catalyst carrier holding member becomes lower, because the binder becomes hardened and constricted about 200°C.

Therefore, claims 5, 6, 7 and 19 are allowable.

The same observation applies to the rejection of claim 8 where, once again, a specific feature of this claim is indeed significant to the invention and should not be simply cast aside as "a matter of obvious design choice".

The specific length of the fiber is "critical". As described in line 24, page 7 to line 9, page 8 of the specification, "With the fiber length being in this range, the fibers can be bound in a sufficiently deflected state ..."

Therefore, claim 8 is allowable.

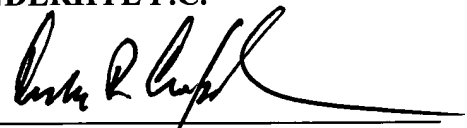
In item 17 of the Official Action claims 10 and 11 have been rejected as being unpatentable over the Merry patent discussed above in combination with a secondary reference. Sanocki (U.S. 5,882,608) discloses a hybrid mounting system 24. The hybrid mounting system 24 is structured into a single piece so as to be surrounded around the monolith 20. Since the hybrid mounting system 24 is a single piece, it is not divided into at least two parts and thus does not support the rejection based upon this reference.

For the above reasons it is respectfully submitted that the claims of this application define inventive subject matter. Reconsideration and allowance are solicited.

Respectfully submitted,

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FIG.1

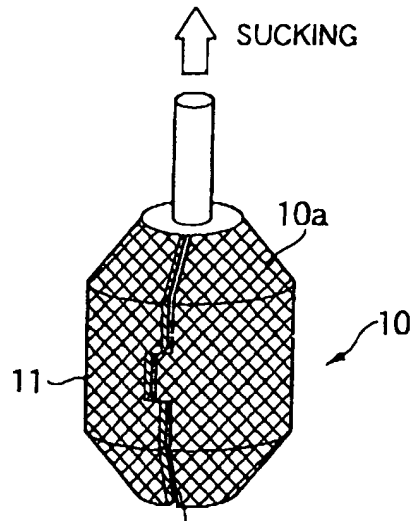


FIG.2

